AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
J	1 | 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
0001	28-Aug-2003	W22W9K-3199-8215	

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than item 6)	CODE
MILITARY/RESERVE TEAM 600 DR. MARTIN LUTHER KING, JR. PLACE, RO LOUISVILLE KY 40202-2230	DACA27	CONTRACT ADMINSTRATION BRANCH ATTN: DEBRAUH M. LARDNER P. O. BOX 59 LOUISVILLE KY 40201-0059	DACA27

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		
	X	9A. AMENDMENT OF SOLICITATION NO. DACA27-03-B-0007
	X	9B. DATED (SEE ITEM 11) 28-Jul-2003
		10A. MOD. OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 13)
CODE / FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer [ ] is extended, [X] is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

[ ] A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

[ ] B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

[ ] C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

[ ] D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor [ ] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Subject Solicitation No. DACA27-03-B-0007 for Construction of USARC, Organizational Maintenance Shop (OMS)/Direct Support General Support Maintenance Shop (DSGS) with Wash Rack, Grand Prairie, TX, is amended as follows:

See attached for Amendment Information.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) TEL: EMAIL:	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNED 28-Aug-2003

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION SF 30 - BLOCK 14 CONTINUATION PAGE

The following have been added by full text:
AMDT. #0001
Grand Prairie US Army Reserve Center
Amendment #1 08/28/03
The following items are the changes made by this amendment:

Drawing Modifications

G0.3	Whole Sheet – Updated Units To Metric
G2.2	Misc. Fence And Note Modifications
C1.1	Whole Sheet – Updated Units To Metric
C1.2	Whole Sheet – Updated Units To Metric
C1.3.1	Whole Sheet – Updated Units To Metric
C1.3.2	Whole Sheet – Updated Units To Metric
C1.4.1	Whole Sheet – Updated Units To Metric
C1.4.2	Whole Sheet – Updated Units To Metric
C1.4.3	Whole Sheet – Updated Units To Metric
C1.4.4	Whole Sheet – Updated Units To Metric
C1.4.5	Whole Sheet – Updated Units To Metric
C1.6	Whole Sheet – Updated Units To Metric
C1.6.1	Whole Sheet – Updated Units To Metric
C1.6.2	Whole Sheet – Updated Units To Metric
C1.6.3	Whole Sheet – Updated Units To Metric
C1.6.4	Whole Sheet – Updated Units To Metric
C1.6.5	Whole Sheet – Updated Units To Metric
A2.2.2	Changes To OMS Tool 101
A2.2.3	Revisions And Section To OMS Tool 101
A4.2.1	Roof Note Modification
S4.3	Trench Drain Detail Modification
M5.1	Added General Note
P0.0	Misc. Note Modifications
P5.1	Added General Note
E0.00	Symbol Description Modification
E3.1.1	Misc. Note Modifications
E3.2.1	Misc. Note Modifications
E7.2	Added General Note

Specification Modifications

01110N	Revised Paragraph 1.2.1 Deleted Pages 4 and 5
05500A	Revised Paragraph 2.16 Deleted Paragraph 2.17 Revised Paragraph 3.12

01520 Deleted Section

SECTION 00010 - SOLICITATION CONTRACT FORM

The Issued By organization has changed from

MILITARY/RESERVE TEAM
600 DR. MARTIN LUTHER KING, JR. PLACE, RO
LOUISVILLE KY 40202-2230

to

USA ENGINEER DISTRICT, LOUISVILLE
ATTN: CELRL-CT
600 DR. MARTIN LUTHER KING PLACE
ROOM 821
LOUISVILLE KY 40202

(End of Summary of Changes)

PROJECT TABLE OF CONTENTS

SECTION 01110N

SUMMARY OF WORK

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

U.S. DEPARTMENT OF DEFENSE (DOD)

MIL-I-16165	(Rev. E) Shielding Harness, Shielding Items and Shielding Enclosures for use in Reduction of Interference from Engine Electrical Systems
MIL-STD-461	(Rev. D) Control of Electromagnetic Interference Emissions and Susceptibility
MIL-STD-462	(Rev. D) Electromagnetic Interference Characteristics

1.2 WORK COVERED BY CONTRACT DOCUMENTS

1.2.1 Project Description

The work includes Construction of a U.S. Army Reserve Center Building (USAC); and an organizational maintenance shop (OMS) combined with a direct support-general support maintenance shop (DSGS) and and wash rack and surrounding parking, landscaping and vehicle storage and incidental related work. A two story wood frame building on piers of approximately 38,000 *01 square feet shall be demolished and removed from the site.(EXISTING BUILDING DEMOLITION SHALL NOT COMMENCE UNTIL NOVEMBER 15, 2003). *01

Hazardous, toxic waste and/or materials may exist on the project site. In the event the contractor encounters or suspects the presence of any hazardous materials in the course of excavating on site, stop excavation work and report your findings to the Resident Engineer. If warranted, the Contractor will retain the services of an Environmental Consultant to establish guidelines for the excavation, removal and delivery of known hazardous materials to an approved hazardous materials depository site.

A limited Environmental Report by HVJ Associates, Inc. (HVJ Report No. 01-108 PEA-), dated Nov. 26, 2001) was conducted on the project site. This report, along with an earlier report by the U.S. Navy is available at the *01 Resident Engineers Office, Room 4A18C of the Federal Building located at 819 Taylor Street, Fort Worth, Texas, for review. *01

Sub-surface water has been detected in the area on other construction projects and may become a problem in the deep excavation areas, although no sub-surface water was encountered in the geotechnical investigations. However, the geotechnical report states that ground water levels may fluctuate seasonally and with climatic changes. The Geotechical Report by HVJ Associates, Inc. (HVJ Report No. 01-202 GH-0, dated March 28, 2002) is available at the Resident Engineers Office for review.

In the event groundwater is encountered during excavation, the Contractor shall report the condition to the Resident Engineer. If the condition requires, the Contractor shall set well points as needed to control the water infiltration.

1.2.2 Location

The work shall be located at the Dallas Naval Station at Grand Prairie, Texas on the track of land bounded by Essayon Drive (Perry Ave.) on the North, Idlewild Road on the East, Thunderbolt Drive (Halsey Street) on the South, and Air Force Drive (Kitty Hawk Street) on the West., approximately as indicated. The exact location will be shown by the Contracting Officer.

1.3 EXISTING WORK

In addition to "FAR 52.236-9, Protection of Existing Vegetation, Streets and Utilities":

a. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.

b. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by the Resident Engineer. At the completion of operations, existing work shall be in a condition equal to or better than that which existed before new work started.

1.4 LOCATION OF UNDERGROUND FACILITIES

Obtain digging permits prior to start of excavation by contacting the Resident Engineer 15 calendar days in advance. Verify the elevations of existing piping, utilities, and any type of underground obstruction not indicated or specified to be removed but indicated in locations to be traversed by piping, ducts, and other work to be installed. Verify elevations before installing new work closer than nearest manhole or other structure at which an adjustment in grade can be made. Perform toning where indicated or shown by the Contracting Officer.

1.4.1 Notification Prior to Excavation

Notify the Resident Engineer at least 15 days prior to starting excavation work. Contact Miss Utility 48 hours prior to excavating. Contractor is responsible for marking all utilities not marked by Utilities.

1.5 RADIO TRANSMITTER RESTRICTIONS

To preclude accidental actuation of sensitive electronic equipment, the Contractor shall conform to the restrictions and procedures for use of radio transmitting equipment. Under no circumstances shall transmitters be used without prior approval.

1.6 ELECTROMAGNETIC INTERFERENCE SUPPRESSION

a. Electric Motors: Motors shall comply with the latest revision of MIL-STD-461 entitled "Electromagnetic Interference Characteristics, Requirements for Equipment", relative to radiated and conducted electromagnetic interference. Test for electromagnetic interference will not be required for motors that are identical physically and electrically to those that have previously met the requirements of MIL-STD-461. Electromagnetic interference suppression and test will not be required for electric motors without communications or slip-rings having more than one starting contact and operated at 3600 revolutions per minute or less.

b. Contractor Construction Equipment: Equipment used by the Contractor shall comply with the latest revisions each for MIL-I-16165 entitled "Interface Shieldings, Engine Electrical Systems" for internal combustion engines and for MIL-STD-461 for other devices capable of producing radiated or conducted interference.

c. Tests for Electromagnetic Interference Suppression: Tests shall be conducted on the equipment described herein. All testing equipment, instruments, personnel for making the tests, the test location which shall be reasonably free from radiated and conducted interference, and other necessary facilities shall be furnished by the Contractor. Tests shall be in accordance with the latest revisions of MIL-STD-462 entitled "Electromagnetic Interference Characteristics, Measurement of."

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

SECTION 05500A

MISCELLANEOUS METAL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ALUMINUM ASSOCIATION (AA)

AA DAF-45	(1997) Designation System for Aluminum Finishes

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI A14.3	(1992) Ladders - Fixed - Safety Requirements
ANSI MH28.1	(1982) Design, Testing, Utilization, and Application of Industrial Grade Steel Shelving

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 123/A 123M	(2001) Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A 283/A 283M	(2000) Low and Intermediate Tensile Strength Carbon Steel Plates
ASTM A 36/A 36M	(2000a) Carbon Structural Steel
ASTM A 467/A 467M	(1998) Machine and Coil Chain
ASTM A 475	(1998) Zinc-Coated Steel Wire Strand
ASTM A 500	(1999) Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
ASTM A 53/A 53M	(2001) Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
ASTM A 653/A 653M	(2000) Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM A 924/A 924M	(1999) General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
ASTM B 221	(2000) Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

ASTM B 221M	(2000) Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric)
ASTM B 26/B 26M	(1999) Aluminum-Alloy Sand Castings
ASTM B 429	(2000) Aluminum-Alloy Extruded Structural Pipe and Tube
ASTM D 2047	(1999) Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine
ASTM E 814	(2000) Fire Tests of Through-Penetration Fire Stops
ASTM F 1267	(1991; R 1997) Metal, Expanded, Steel

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

ASCE 7	(1998) Minimum Design Loads for Buildings and Other Structures

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1/D1.1M	(2000) Structural Welding Code - Steel

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM)

NAAMM MBG 531	(1994) Metal Bar Grating Manual
NAAMM MBG 532	(1994) Heavy Duty Metal Bar Grating Manual

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10	(1998; Errata 10-98-1) Portable Fire Extinguishers
NFPA 211	(2000) Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

CID A-A-344	(Rev B) Lacquer, Clear Gloss, Exterior, Interior

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Miscellaneous Metal Items; G

Detail drawings indicating material thickness, type, grade, and class; dimensions; and construction details. Drawings shall include catalog cuts, erection details, manufacturer's descriptive data and installation instructions, and templates. Detail drawings for the following items: stairs, handrails, ladders, gratings, and grated walkways, roof scuttles.

SD-04 Samples

Miscellaneous Metal Items; G

Samples of the following items: stairs, handrails, ladders, gratings, and grated walkways. Samples shall be full size, taken from manufacturer's stock, and shall be complete as required for installation in the structure. Samples may be installed in the work, provided each sample is clearly identified and its location recorded.

1.3 GENERAL REQUIREMENTS

The Contractor shall verify all measurements and shall take all field measurements necessary before fabrication. Welding to or on structural steel shall be in accordance with AWS D1.1/D1.1M. Items specified to be galvanized, when practicable and not indicated otherwise, shall be hot-dip galvanized after fabrication. Galvanizing shall be in accordance with ASTM A 123/A 123M, ASTM A 653/A 653M, or ASTM A 924/A 924M, as applicable. Exposed fastenings shall be compatible materials, shall generally match in color and finish, and shall harmonize with the material to which fastenings are applied. Materials and parts necessary to complete each item, even though such work is not definitely shown or specified, shall be included. Poor matching of holes for fasteners shall be cause for rejection. Fastenings shall be concealed where practicable. Thickness of metal and details of assembly and supports shall provide strength and stiffness. Joints exposed to the weather shall be formed to exclude water.

1.4 DISSIMILAR MATERIALS

Where dissimilar metals are in contact, or where aluminum is in contact with concrete, mortar, masonry, wet or pressure-treated wood, or absorptive materials subject to wetting, the surfaces shall be protected with a coat of bituminous paint or asphalt varnish.

1.5 WORKMANSHIP

Miscellaneous metalwork shall be well formed to shape and size, with sharp lines and angles and true curves. Drilling and punching shall produce clean true lines and surfaces. Welding shall be continuous along the entire area of contact except where tack welding is permitted. Exposed connections of work in place shall not be tack welded. Exposed welds shall be ground smooth. Exposed surfaces of work in place shall have a smooth finish, and unless otherwise approved, exposed riveting shall be flush. Where tight fits are required, joints shall be milled. Corner joints shall be coped or mitered, well formed, and in true alignment. Work shall be accurately set to established lines and elevations and securely fastened in place. Installation shall be in accordance with manufacturer's installation instructions and approved drawings, cuts, and details.

1.6 ANCHORAGE

Anchorage shall be provided where necessary for fastening miscellaneous metal items securely in place. Anchorage not otherwise specified or indicated shall include slotted inserts made to engage with the anchors, expansion shields, and power-driven fasteners when approved for concrete; toggle bolts and through bolts for masonry; machine and carriage bolts for steel; and lag bolts and screws for wood.

1.7 SHOP PAINTING

Surfaces of ferrous metal except galvanized surfaces, shall be cleaned and shop coated with the manufacturer's standard protective coating unless otherwise specified. Surfaces of items to be embedded in concrete shall not be painted. Items to be finish painted shall be prepared according to manufacturer's recommendations or as specified.

PART 2 PRODUCTS

2.1 ACCESS DOORS AND PANELS

Doors and panels shall be flush type unless otherwise indicated. Frames for access doors shall be fabricated of not lighter than 16 gauge steel with welded joints and finished with anchorage for securing into construction. Access doors shall be a minimum of 14 by 20 inches and of not lighter than 14 gauge steel, with stiffened edges, complete with attachments. Access doors shall be hinged to frame and provided with a flush face, screw driver operated latch. Exposed metal surfaces shall have a shop applied prime coat. Install Manufacturer's standard locking device on the interior side of door.

2.2 VENTS

Vents shall be designed and constructed in accordance with NFPA 211. Seams and joints shall be welded, except that an angle flange shall be provided for connection to the boiler, other equipment, and stack support.

2.3 PIPE GUARDS

Pipe guards shall be heavy duty steel pipe conforming to ASTM A 53M, Type E or S, weight STD, galvanized finish.

2.4 DOWNSPOUT BOOTS

Downspout boots shall be cast iron with receiving bells sized to fit downspouts.

2.5 FLOOR GRATINGS AND FRAMES

Carbon steel grating shall be designed in accordance with NAAMM MBG 531 or NAAMM MBG 532 to meet the indicated load requirements. Edges shall be banded with bars 1/4 inch less in height than bearing bars for grating sizes above 3/4 inch. Banding bars shall be flush with the top of bearing grating. Frames shall be of welded steel construction finished to match the grating. Floor gratings and frames shall be galvanized after fabrication.

2.6 FLOOR PLATES

Floor plates shall be thick, raised thread steel.

2.7 HANDRAILS

Handrails shall be designed to resist a concentrated load of 200 pounds in any direction at any point of the top of the rail or 20 pounds per foot applied horizontally to top of the rail, whichever is more severe.

2.7.1 Steel Handrails, Including Carbon Steel Inserts

Steel handrails, shall be steel pipe conforming to ASTM A 53M or structural tubing conforming to ASTM A 500, Grade A or B of equivalent strength. Steel railings shall be nominal size. Railings shall be hot-dip galvanized. Pipe collars shall be hot-dip galvanized steel.

a. Joint posts, rail, and corners shall be fabricated by one of the following methods:

(1) Flush type rail fittings of commercial standard, welded and ground smooth with railing splice locks secured with 3/8 inchhexagonal recessed-head setscrews.

(2) Mitered and welded joints by fitting post to top rail and intermediate rail to post, mitering corners, groove welding joints, and grinding smooth. Railing splices shall be butted and reinforced by a tight fitting interior sleeve not less than 6 inches long.

2.8 LADDERS

Ladders shall be galvanized steel, fixed rail type in accordance with ANSI A14.3.

2.9 MIRROR FRAMES

Frames for plate glass mirrors larger than 18 by 30 inches shall be fabricated from corrosion-resisting steel with satin finish. Frames shall be provided with concealed fittings and tamperproof mountings.

2.10 MISCELLANEOUS

Miscellaneous plates and shapes for items that do not form a part of the structural steel framework, such as lintels, sill angles, miscellaneous mountings, and frames, shall be provided to complete the work.

2.11 ROOF SCUTTLES

Roof scuttles shall be of galvanized steel not less than 14 gauge, with 3 inch beaded flange welded and ground at corners. Scuttle shall be sized to provide minimum clear opening of 37 by 30 inches. Cover and curb shall be insulated with 1 inch thick rigid insulation covered and protected by galvanized steel liner not less than. The curb shall be equipped with an integral metal cap flashing of the same gauge and metal as the curb, full welded and ground at corners for weathertightness. Scuttle shall be completely assembled with heavy hinges, compression spring operators enclosed in telescopic tubes, positive snap latch with turn handles on inside and neoprene draft seal. Fasteners shall be provided for padlocking on the inside. The cover shall be equipped with an automatic hold-open arm complete with handle to permit one hand release.

2.12 SAFETY CHAINS

Safety chains shall be galvanized welded steel, proof coil chain tested in accordance with ASTM A 467/A 467M, Class CS. Safety chains shall be straight link style, 3/16 inch diameter, minimum 12 links per foot and with bolt type snap hooks on each end. Eye bolts for attachment of chains shall be galvanized 3/8 inch bolt with 3/4 inch eye, anchored as indicated. Two chains shall be furnished for each guarded opening.

2.13 SAFETY NOSING

Safety nosings shall be of cast iron with cross-hatched, abrasive surface. Nosing shall be 3 inches wide and terminating at not more than 6 inches from the ends of treads, except nosing for metal pan cement-filled treads shall extend the full length of the tread. Safety nosings shall be provided with anchors not less than 3/4 inch long. Integrally cast mushroom anchors are not acceptable.

2.14 STEEL STAIRS

Steel stairs shall be complete with structural or formed channel stringers, metal pan cement-filled treads, landings, columns, handrails, and necessary bolts and other fastenings as indicated. Structural steel shall conform to ASTM A 36/A 36M. Stairs and accessories shall be galvanized. Risers on stairs with metal pan treads shall be deformed to form a sanitary cove to retain the tread concrete. Integral nosings shall have braces extended into the concrete fill. Gratings for treads and landings shall conform to NAAMM MBG 531. Grating treads shall have slip-resistant nosings.

2.15 STEEL DOOR FRAMES

Steel door frames built from structural shapes shall be neatly mitered and securely welded at the corners with all welds ground smooth. Jambs shall be provided with 2 by 1/4 by 12 inch bent, adjustable metal anchors spaced not over 2 feet 6 inches on centers. Provision shall be made to stiffen the top member for all spans over 3 feet. Continuous door stops shall be made of 1-1/2 by 5/8 inch bars. Frames to be galvanized after fabrication.

2.16 TRENCH COVERS, FRAMES, AND LINERS

*01 Trench covers shall be extra heavy duty to meet the indicated load requirements. Trench frames and anchors shall be all cast iron construction designed to match cover. Grating opening widths shall not exceed 1 inch. Trench liners shall be galvanized sheet metal welded to trench frame. *01

*01 2.17 FIRE EXTINGUISHER CABINETS (NOT USED) *01

PART 3 EXECUTION

3.1 GENERAL INSTALLATION REQUIREMENTS

All items shall be installed at the locations shown and according to the manufacturer's recommendations. Items listed below require additional procedures as specified.

3.2 REMOVABLE ACCESS PANELS

A removable access panel not less than 12 by 12 inches shall be installed directly below each valve, flow indicator, damper, or air splitter that is located above the ceiling, other than an acoustical ceiling, and that would otherwise not be accessible.

3.3 INSTALLATION OF VENTS

Vents shall be installed in accordance with NFPA 211. Roof housing, rain cap, downdraft diverter, fire damper, and other accessories required for a complete installation shall be provided. Sections of prefabricated lined stacks shall be joined with acid-resisting high-temperature cement and steel draw bands.

3.4 DOOR GUARD FRAME

Door guard frame shall be mounted over the glazed opening using 1/4 inch lag bolts on the interior of wood doors or tamperproof through bolts on the interior of metal doors.

3.5 INSTALLATION OF PIPE GUARDS

Pipe guards shall be set vertically in concrete piers. Piers shall be constructed of, and the hollow cores of the pipe filled with, concrete having a compressive strength of 3000 psi.

3.6 INSTALLATION OF DOWNSPOUT BOOTS

Downspouts shall be secured to building through integral lips with appropriate fasteners.

3.7 ATTACHMENT OF HANDRAILS

Toeboards and brackets shall be installed where indicated. Splices, where required, shall be made at expansion joints. Removable sections shall be installed as indicated.

3.7.1 Installation of Steel Handrails

Installation shall be by means of pipe sleeves secured to masonry with expansion shields and bolts or toggle bolts. Rail ends shall be secured by steel pipe flanges anchored by expansion shields and bolts.

3.8 RECESSED FLOOR MATS

Contractor shall verify field measurements prior to releasing materials for fabrication by the manufacturer. A mat frame shall be used to ensure recess accuracy in size, shape and depth. Drain pit shall be formed by blocking out concrete when frames are installed. Pit shall be dampproofed after concrete has set. Frames shall be assembled onsite and installed so that upper edge will be level with finished floor surface. A cement base shall be screeded inside the mat recess frame area using the edge provided by the frame as a guide. The frame shll be anchored into the cement with anchor pins a minimum of 610 mm on centers.

3.9 MOUNTING OF SAFETY CHAINS

Safety chains shall be mounted 3 feet 6 inches and 2 feet above the floor. Attached to eye bolts in the hollow metal door frame.

3.10 INSTALLATION OF SAFETY NOSINGS

Nosing shall be completely embedded in concrete before the initial set of the concrete occurs and shall finish flush with the top of the concrete surface.

3.11 DOOR FRAMES

Door frames shall be secured to the floor slab by means of angle clips and expansion bolts. Continuous door stops shall be welded to the frame or tap screwed with countersunk screws at no more than 18 inch centers, assuring in either case full contact with the frame. Any necessary reinforcements shall be made and the frames shall be drilled and tapped as required for hardware.

3.12 TRENCH FRAMES AND COVERS

*01 Trench frames and covers shall be cast into the concrete floor and set flush with the floor in locations shown on drawings. Slope frames to drain lines. *01

3.13 INSTALLATION OF WHEEL GUARDS

Wheel guards shall be filled with concrete and anchored to the floor or the building according to the manufacturer's recommendations.

-- End of Section --